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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,108	12/07/2004	Adrianus Sempel	32350-258519	1317
44920	7590	11/04/2008		
Venable LLP Raymond J. Ho 575 7th Street NW Washington, DC 20004-1601			EXAMINER BODDIE, WILLIAM	
			ART UNIT	PAPER NUMBER
			2629	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/517,108	Applicant(s) SEMPEL ET AL.	
	Examiner WILLIAM L. BODDIE	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,29-31 and 33-35 is/are pending in the application.
- 4a) Of the above claim(s) 33-35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11 and 29-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In an amendment dated August 14th, 2008 the Applicants amended claim 11 and cancelled claims 27-28. Currently claims 11, 29-31 are currently pending.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 14th, 2008 has been entered.

Response to Arguments

3. Applicant's arguments with respect to claims 11 and 29-31 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 29 is rejected under 35 U.S.C. 102(b) as being anticipated by Tajima et al. (US 6,636,187).

With respect to claim 29, Tajima discloses, a display device comprising:

a display unit that is configured to display data content on a plurality of lines (fig. 9),

a control unit (482 in fig. 9) that is configured to select and scan the plurality of lines based on a select sequence of a plurality of line selection sequences (first and second scan sequencer in fig. 9),

wherein the control unit is configured to select the select sequence based on the data content (col. 10, lines 36-41; control unit selects the scan sequence that will result the least amount of changing display data; also note fig. 11).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Toyoda et al. (US 6,448,952) in view of Konno et al. (US 6,940,481).

With respect to claim 11, Toyoda discloses, a method of scanning lines in a display (fig. 1), comprising:

selecting a first set of sequential lines of the display (Y2(1)-Y2(n) in fig. 1) and thereafter scanning lines relative to a first selected line until all the lines of the first set have been scanned (col. 16, lines 24-30), and

selecting a second set of sequential lines of the display ($Y1(1)$ - $Y1(n)$ in fig. 1) and thereafter scanning lines relative to a first selected line of the second set until all lines of the second set of lines have been scanned (col. 16, lines 24-30),

wherein a line in the first set is selected simultaneously with a line in the second set (col. 16, line 27).

Toyoda does not expressly disclose the alternate scanning method.

Konno discloses, a method of scanning lines in a display, comprising:

selecting a line (line n in fig. 19) between a first and a last line of a first set of sequential lines ($1 \dots (n+n/2)$) of the display and thereafter alternately selecting and scanning a lower order line (line $n+1$) and a higher order line (line $n-1$) relative to the first selected line until all lines of the first set have been scanned (fig. 19).

Konno and Toyoda are analogous art because they are both from the same field of endeavor namely scanning methods for active matrix displays.

At the time of the invention it would have been obvious to one of ordinary skill in the art to replace the consecutive scanning of the individual panels of Toyoda with the alternating scanning taught by Konno.

The motivation for doing so would have been to reduce a selection period and achieve good motion images (Konno; col. 21, line 62 – col. 22, line 5).

To further explain how the combination teaches all of the claim limitations, it is seen as obvious one of ordinary skill in the art would replace the sequential scanning of $Y2(1-n)$ with the alternate scanning of Konno. Likewise, replacing the sequential scanning of $Y1(1-n)$ of Toyoda with the alternate scanning is also seen as obvious.

As to the last set of limitations requiring that a lower order line in the first set be selected simultaneously with a higher order line in the second set and vice versa, this should will also be apparent upon the combination. To explain, upon combining, figure 19 of Konno will represent the scanning order of both the upper and lower portions of Toyoda. Therefor when a lower order line in the first set of Toyoda, $Y2(n+1)$ for example, is selected a higher order line in the second set of Toyoda, $Y1(n-1)$, will also be simultaneously be selected, and vice versa.

8. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tajima et al. (US 6,636,187) in view of Herbert (US 6,014,125).

With respect to claim 30, Tajima discloses, the display device of claim 29 (see above).

Tajima does not expressly disclose wherein the data is classified as text or graphics and the select sequence selected based on the data classification. However it should be noted that it is likely that text displays, with often static, unchanging data, will result in a selection of scan sequence 1. Likewise, graphical display often involves dynamic, motion data and will likely result in selection of scan sequence 2.

Herbert discloses, wherein data content is classified using a classification that includes text and graphics (col. 4, lines 61-67), and the control unit is configured to select the select sequence timing based on the classification of the data content (col. 4, lines 61-67).

Tajima and Herbert are analogous art because they are from the same field of endeavor namely flat panel display device control circuitry, specifically scan timing and selection.

At the time of the invention it would have been obvious to one of ordinary skill in the art to also select the scan sequence of Tajima based on whether the data is text or graphics, as taught by Herbert.

The motivation for doing so would have been to reduce screen swimming (Herbert; col. 3, lines 1-4).

9. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tajima et al. (US 6,636,187) in view of Kurumisawa et al. (US 6,262,704).

With respect to claim 31, Tajima discloses, the display device of claim 29 (see above).

Tajima does not expressly disclose, wherein the control unit is configured to select the select sequence based on whether the device is in a standby mode of operation.

Kurumisawa discloses, wherein a scanning select sequence is based on whether the device is in a standby mode of operation (Abstract).

Kurumisawa and Tajima are analogous art because they are both from the same field of endeavor namely, scan line control.

At the time of the invention it would have been obvious to one of ordinary skill in the art to alter the scan sequence of the display of Tajima such that less lines are scanned in when the display is in a standby state, as taught by Kurumisawa.

The motivation for doing so would have been to further lower power consumption of the display (Kurumisawa; Abstract).

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM L. BODDIE whose telephone number is (571)272-0666. The examiner can normally be reached on Monday through Friday, 7:30 - 4:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sumati Lefkowitz/
Supervisory Patent Examiner, Art Unit 2629

/William L Boddie/
Examiner, Art Unit 2629
11/4/08